

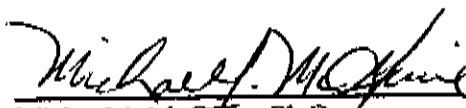
Exhibit C

- IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA**

4. I engaged Clifton Bell, a qualified environmental engineer with Malcolm Pirnie to assist with statistical analyses of datasets for my work for the Defendants in the above-styled matter. Mr. Bell's résumé is attached to this Affidavit and incorporated by reference.
5. During my two days of deposition, Plaintiffs' failed to ask me questions regarding the importance of TOC collection times and locations. Based on my extensive experience with this parameter since the early 1980s, TOC data generally do not vary significantly over time for particular water supplies. The TOC in a water supply is generally representative of the watershed characteristics, soil composition, and overall algal productivity. More than twenty years (1984 to 2009) of TOC data from Lake Mathews in Southern California has varied little around a range of 2.6 to 3.8 mg/L. Given this relative stability of TOC data over time, comparing long-term TOC datasets for different water supplies collected up to ten years apart is appropriate.
6. I previously authored and submitted to the Defendants an expert report detailing my work and conclusions in this matter. I understand that this report was served on Plaintiffs on January 30, 2009. I incorporate that report herein by reference.
7. If called to testify at trial, I would testify consistent with the opinions expressed in my expert report.

I declare under penalty of perjury that the foregoing is true and correct.

Executed 5 June, 2009.


Michael J. McGuire, Ph.D.
11656 Gateway Blvd.
Los Angeles, CA 90064

Résumé of Clifton Bell

Mr. Bell is an environmental scientist with expertise in water quality management, data analysis, and modeling. Much of his project work involves the interpretation of hydrologic, water quality, and biological data to support the development of management goals and methodologies. He is one of Malcolm Pirnie's leaders in stressor identification studies, by which multivariate statistical analysis and data mining techniques are utilized to verify cause and effect relations in environmental datasets. Mr. Bell has served as the technical lead on water quality management projects in multiple states including Alabama, Arizona, Florida, South Carolina, and Virginia.

SELECTED EXPERIENCE

City of Hopewell: Hopewell Estuary Region Monitoring and Assessment Project / Hopewell VA. As project manager, led multi-year scientific program to support water quality management planning for tidal freshwater portion of the James River estuary. Designed and implemented surface water quality monitoring program to assess sources and hydrologic controls on nutrients and suspended solids in tidal freshwater James River. Performed scientific studies and statistical data analysis to identify controls on water quality, benthic macroinvertebrates, plankton, fish and potential for restoration of submerged aquatic vegetation. Performed water quality modeling to assess environmental benefit of various watershed management scenarios, including biological nutrient removal.

Birmingham Water Works & Sewer Board: Reservoir Protection Planning / Birmingham AL. Quality assurance manager for project to evaluate vulnerability of two large municipal water supply reservoirs to future watershed build-out. Developed method for modeling pollutant loading and reservoir water quality response. Evaluated various scenarios, including use of stormwater BMPs and riparian buffers.

U.S. Geological Survey: Chesapeake Bay Ecosystem Program / Chesapeake Bay Basin VA. Developed statistical models of nutrient and sediment transport in the nontidal part of the Chesapeake Bay watershed, used to assess major changes in land cover patterns on water quality.

Virginia and Maryland Associations of Municipal Wastewater Agencies: Nutrient Criteria Derivation / Virginia and Maryland. Ongoing, multi-year project to represent municipal stakeholder group in the state-

Clifton F. Bell

Senior
Environmental
Scientist

Title/Firm:

Associate
Malcolm Pirnie, Inc.

Years of Experience

19

Education

BS Geology College of
William and Mary 1990

MS Environmental
Engineering Virginia
Tech 1995

Licenses and Certifications

Professional Engineer
(VA)

Professional Geologist
(VA)

Certified Nutrient
Management Planner
(VA)

Societies

Soil and Water
Conservation Society,
Vice President,
Virginia Chapter

Water Environment
Federation, Chair,
VWEA Government
Affairs Committee

Employment History

Malcolm Pirnie, Inc.
1997 to present

Randolph-Macon College
1994 to 1997

U.S. Geological Survey
1992 to 1997

Department of
Environmental
Engineering, Virginia
Tech 1990 to 1992

led development of nitrogen and phosphorus standards for lakes, reservoirs, and free-flowing streams. Performed numerous statistical analyses and communications to support and advocate sound science in the standards development process.

Chestatcc-Chattahoochee RC&D Council, In: Watershed Management Planning / Demorest GA. Developed comprehensive watershed management plan for two impaired streams in norther Georgia. Identified existing pollutant sources and specified management practices for restoring streams. Developed implementation program elements, and facilitating stakeholder discussions.

MSD Associates: Little Pee Dee TMDL / Florence SC. Performed comprehensive watershed assessment and TMDL analysis for bacteria-impaired watershed spanning two states. Assisted with development of implementation plan, and facilitated stakeholder meetings.

South Florida Water Management District: St. Lucie Estuary Productivity Study / Port St. Lucie, FL. Lead scientist on complex data analysis of nutrient flux and algal responses in a coastal estuary. Developed statistical models of estuarine primary productivity and nutrient budgets. Evaluated controls on benthic nutrient fluxes and role of benthic fluxes in supporting algal growth. Developed recommendations for water quality management of the estuary.

Arizona Department of Environmental Quality: Stoneman Lake TMDL Project / Stoneman Lake AZ. As lead scientist, developed TMDL for one of Arizona's only natural lakes. Performed watershed/water quality modeling to evaluate the benefits of various implementation scenarios. Modeled response of submerged grasses to changes in lake depth and water quality. Evaluated cost and feasibility of alternatives, and helped watershed stakeholders achieve consensus. This project won engineering excellence awards from the Arizona Consulting Engineers Association and the American Academy of Environmental Engineers.

Pee Dee Resource Conservation and Development Council: Thompson Creek Nonpoint Source Assessment Project / Chesterfield SC. As lead scientist, worked with a diverse group of watershed stakeholders to allocate a bacterial TMDL and implementation plan in an agricultural watershed. Developed hydrologic and water quality monitoring program, data analysis, pollutant transport model, and implementation scenarios.

Arizona Department of Environmental Quality: Mule Gulch TMDL Study / Bisbee AZ. As lead scientist, developed a GIS-based hydrologic and water quality model to simulate the transport of heavy metals in a copper-mine-impacted watershed. Worked with multiple stakeholders to develop implementation plans and to derive site-specific water quality goals. Trained client to modify and execute model.

Arizona Department of Environmental Quality: Pinto Creek TMDL / Miami AZ. Project manager for a TMDL modeling study in central Arizona. Developing a GIS-based model of copper transport in a complex hydrologic system that include perennial and ephemeral stream reaches. Working with representative from the mining industry, environmental groups, and regulators to determine the water quality effects and benefits of various mining and reclamation activities.

Birmingham Water Works and Sewer Board: Cahaba River Stressor Identification Study / Birmingham, AL. Performed complex graphic and statistical data analysis to determine relations between water quality, habitat, and biological variables in a free-flowing river system. Information was used to support development of river restoration goals.

Accomack-Northampton Planning District Commission: Water/Wastewater Planning for Disadvantaged Communities / VA. Led evaluation and monitoring of water supply and sanitary facilities for disadvantaged rural communities to assist planning of community block grant projects.

Birchwood Power Facility: NPDES Permitting / King George VA. Prepared NPDES permit applications for a steam electric power plant and associated greenhouse facility. Successfully negotiated appropriate permit conditions for several complex issues, including the proper application of federal effluent guidelines and phosphorus discharges.

City of Clovis: Antidegradation Analysis / Clovis CA. Performed comprehensive antidegradation study to evaluate impact of proposed water reclamation facility on beneficial uses of receiving waters. Project involved full review of relevant regulations, estimation of effluent characteristics, and modeling of receiving water quality. Participating in regulatory negotiations to ensure successful permitting of project.

Tenaska, Inc.: NPDES Review / Scottsville VA. Performed detailed technical review of draft NPDES permit conditions for a utility (cooling) water discharge. Negotiated more favorable and appropriate conditions based on hydrologic analysis and proper application of state and federal guidance.

Coors Brewing Company: NPDES Permitting / Elkton VA. Prepared NPDES renewal application for large brewery and packing facility with process wastewater and stormwater discharges. Negotiated favorable and appropriate permit conditions with state regulator. Led nutrient management workshop to identify strategies for attaining and maintaining nutrient wasteload allocations.

Daikin America, Inc.: Mixing Analysis for NPDES Permit Renewal / Decatur IL. Performed hydrologic field study to identify appropriate location for new industrial wastewater discharge to the Tennessee River. Performed CORMIX modeling of discharge and determined diffuser design that would satisfy all regulatory requirements with regard to exit velocity and mixing.

Dominion Resource Services, Inc.: Hopewell Supply / Hopewell VA. Performed comprehensive evaluation of water supply alternatives for power plant. Options evaluated including potable water supplies, surface water, groundwater, and reused water from local industries. Evaluated each source relative to quality, quantity, and cost. Produced summary report of options.

Fairfax County Water Authority: Recycle Streams Analysis, Corbalis WTP / Herndon VA. Member of team evaluating the impact of recycle streams on water treatment and residuals dewatering. Performed bench-scale testing of residuals settling and dewaterability, as well as jar test of alternative coagulant. Sampled water treatment process waters and residuals.

Invista, Inc.: Wasteload Allocation Modeling and NPDES Permitting / Lugoff SC. Prepared complex NPDES application for chemical manufacturing facility including stormwater and industrial wastewater flows. Performed detailed technical review of wasteload allocation model and negotiated more favorable allocations based on model adjustments. Created mixing zone model to negotiate minimum instream flow requirements as controlled by upstream dam releases.

Virginia Port Authority: Stormwater Quality Compliance Study / Hampton Roads VA. Led investigation to determine sources of storm water contamination at three large port facilities. Devised storm water monitoring program and evaluated effectiveness of current storm water quality protection measures. Provided recommendations to address problem areas by both structural and nonstructural management practices.

U.S. Geological Survey: River Input Monitoring Project / Chesapeake Bay Basin VA. As Project Chief, managed wet-weather monitoring program of five major tributaries to the Chesapeake Bay. Performed statistical modeling of water quality and trend analysis. Interpreted effects of point and non-point sources on water quality. Published scientific-interpretive reports of effects of point and non-point sources on water quality to be used by environmental managers.

PUBLICATIONS:

Bell, C.F., "Non-Point Source Offsets: Potential Availability and Costs," presented at the 59th Annual Meeting of the Virginia Water Environment Association, Roanoke VA, May 3, 2006.

Bell, C.F., "Methods of Setting Appropriate Nutrient Targets for Surface Waters," *Proceedings*, Joint Annual Meeting of the American Water Works Association, Virginia Section and the Virginia Water Environment Association (JAM 2005), Virginia Beach VA, September 25-29, 2005.

Bell, C.F., "Stream and Mixing Zone Modeling: Roles in Permitting," presented at the Engineering Workshop of the Water Environment Association of South Carolina, Columbia SC, September 27, 2005.

Bell, C.F., "How TMDLs Can Affect POTWs...and Vice-Versa," presented at the 20th Annual Tri-State Seminar-On-the-River, Arizona Water and Pollution Control Association, Primm NV, September 23-25, 2004.

Bell, C. F., Olsen, G. , Sagstad, S. R., Manuszak, J. D., "Modeling Metals Transport in Copper Terrain," *Proceedings*, National TMDL Science and Policy Conference, Phoenix AZ, November 2002.

Cotton, C. A., Linden, K. G., Schmelling, D. C., Bell, C. F., Darnault, C. J., "The Development, Application, and Cost Implications of the UV Dose Tables for LT2ESWTR Compliance," *Proceedings*, Water Quality Technology Conference, Nashville TN, November 11-14, 2001.

Cotton, C. A., Linden, K. G., Schmelling, D. C., Bell, C. F., Landis, H. E., "The Development of the UV Dose Tables for LT2ESWTR Implementation," *Proceedings*, First Annual Conference of the International Ultraviolet Association, Washington DC, June 14-16, 2001.

- Bell, C. F., "Using the TMDL Process to Improve Lakes with Natural Impairments," presented at the 44th Annual Conference of the Mississippi Water Environment Association, Jackson MS, June 8, 2001.
- Bell, C. F., "The Hopewell Estuary Region Monitoring and Assessment Project," presented at an Industrial Seminar sponsored by the Virginia Water Environment Association, Charlottesville VA, February 21, 2001.
- Bell, C. F., "Can We Un-Eutrophy Lakes Using TMDLS?," presented at the Alabama Water Resources Conference, Gulf Shores AL, September 7, 2000.
- Bell, C. F., Grandstaff, E. E., "Will Biological Nitrogen Removal Improve my Receiving Stream? Water Quality Monitoring as an Investigative Tool," *Proceedings*, 72nd Annual Conference and Exposition of the Water Environment Federation (WEFTEC '99), New Orleans LA, October 13, 1999.
- Bell, C. F., "*Hydrogeology and Water Quality of the Shallow Aquifer System at the Explosive Experimental Area, Naval Surface Warfare Center, Dahlgren Site, Dahlgren, Virginia*," U.S. Geological Survey Water Resources Investigations Report 96-4209, 1996. 37 pp.
- Bell, C. F., Belval, D. B., Campbell, J. P., "*Trends in Nutrients and Suspended Solids at the Fall Line of Five Tributaries of the Chesapeake Bay in Virginia, July 1988 Through June 1995*," U.S. Geological Survey Water Resources Investigations Report 96-4209, 1996. 37 pp.
- Harlow, G. E., Bell, C. F., "*Hydrogeology and Waste Quality of the Shallow Aquifer System at the Mainside, Naval Surface Warfare Center, Dahlgren Site, Dahlgren, Virginia*," U.S. Geological Survey Water Resources Investigations Report 96-4055, 1996. 34 pp.
- Richardson, D. L., Bell, C. F., "*A Method of Estimating Groundwater Discharge from the Coastal Plain of Virginia*," *Proceedings*, 1994 Chesapeake Research Conference, Chesapeake Research Consortium, 1995. 724 pp.
- Bell, C. F., "*Monitoring for Sulfonated Azo Dyes and their Degradation Products in Municipal and Industrial Wastewater*," Masters Thesis, Department of Civil Engineering, Virginia Polytechnic Institute and State University, 1995. 131 pp.